96

# VISION IAS

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## GENERAL STUDIES (TEST CODE : 1247)

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|---|---|---|---|
| Name of Candidate | UTKARSH KUMAR | | |
| Medium Eng./Hindi | ENGLISH | Registration Number | 660223 |
| Center | ORN | Date | 10.09.2019 |

### INDEX TABLE

| Q. No. | Maximum Marks | Marks Obtained |
|---|---|---|
| 1 | 10 | |
| 2 | 10 | |
| 3 | 10 | |
| 4 | 10 | |
| 5 | 10 | |
| 6 | 10 | |
| 7 | 10 | |
| 8 | 10 | |
| 9 | 10 | |
| 10 | 10 | |
| 11 | 15 | |
| 12 | 15 | |
| 13 | 15 | |
| 14 | 15 | |
| 15 | 15 | |
| 16 | 15 | |
| 17 | 15 | |
| 18 | 15 | |
| 19 | 15 | |
| 20 | 15 | |

**Total Marks Obtained:**

**Remarks:**

### INSTRUCTIONS

1. Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code).
   उत्तर पुस्तिका में सूचनाएं भरना आवश्यक है (नाम, प्रश्न–पत्र कोड, विद्यार्थी क्रमांक आदि)।
2. There are **TWENTY** questions printed in **ENGLISH & HINDI**
   इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।
3. **All questions are compulsory.**
   सभी प्रश्न अनिवार्य हैं।
4. The number of marks carried by a question/part is indicated against it.
   प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
5. Answers must be written in the medium authorized in the Admission Certificate, which must be stated clearly on the cover of this Question-Cum-Answer (QCA) Booklet in the space provided. No marks will be given for answers written in medium other that the authorized one.
   प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहिए जिसका उल्लेख आपके प्रवेश पत्र में किया गया है और उस माध्यम का स्पष्ट उल्लेख प्रश्न–सह–उत्तर (क्यूसीए) पुस्तिका के मुख्य पृष्ठ पर अंकित निर्दिष्ट स्थान पर किया जाना चाहिए। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में लिए गए उत्तर पर कोई अंक नहीं मिलेंगे।
6. Word limit in questions, if specified, should be adhered to.
   प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
7. Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off.
   उत्तर पुस्तिका में खाली छोड़ा हुआ पृष्ठ या उसके अंश को स्पष्ट रूप से काटा जाना चाहिए।

16-B, 2nd Floor, Above National Trust Building, Bada Bazar Marg, Old Rajinder Nagar, Delhi-110060

Plot No. 857, 1st Floor, Banda Bahadur Marg (Opp Punjab & Sindh Bank), Dr. Mukherjee Nagar Delhi- 110009

# EVALUATION INDICATORS

1. Contextual Competence
2. Content Competence
3. Language Competence
4. Introduction Competence
5. Structure - Presentation Competence
6. Conclusion Competence

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

All the Best

Don't write anything this margin (इस भाग में कुछ ना लिखें)

1. Mention the structure and functions of NITI Aayog. Also, comment on its contemporary relevance. **(150 words) 10**

नीति (NITI) आयोग की संरचना और प्रकार्यों का उल्लेख कीजिए। साथ ही, इसकी समकालीन प्रासंगिकता पर भी टिप्पणी कीजिए।

NITI Aayog was constituted by an executive resolution on August 2014, replacing the Planning Commission (PC).

Structure:

1. Prime Minister as de facto Chairperson
2. Appointed chairperson
3. Governing council of CMs of states and UTs and LGs of UTs.
4. Team India wing
5. Research and Consultancy wing

Functions of NITI Aayog:

1. Premier policy think tank for central govt (eg: white paper on AI, draft policies)
2. Enabler for govt by connecting it to domain experts from market.
3. Compile best practices from all states and UTs (cooperative federalism) and create knowledge repository.

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(4) Come out with indices promoting healthy competition among states (competitive federalism)

(5) Organise series of lectures - Transforming India for involved stake holders

(6) Nodal agency for SDG implementation

(7) 3 year action, 7 year vision, 11 year strategy documents.

Contemporary relevance:

(1) Enable decision making from ground-up approach (rather than top-down in PC)

(2) 3-4 times fewer employees than PC (minimum govt, maximum governance)

(3) Sharing of best practices and healthy competition ensures we don't work in silos.

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2. Critically discuss the practice of setting up Fast Track Courts to reduce pendency of cases in the judiciary. **(150 words) 10**

न्यायालयों में लंबित वादों को कम करने के लिए फास्ट ट्रैक कोर्ट को स्थापित करने की कार्यप्रणाली की आलोचनात्मक विवेचना कीजिए।

Fast Track Courts are specially designated courts for speedy disposal of a certain type of cases. They were recently recommended by Supreme Court for mob lynching cases.

Helpful:

① Adequate focus to the offence / type of off cases.

② Judges in such courts see similar offences and thus dispose them faster (specialisation through repeated exposure).

Not helpful:

① Short term aid for some offences.

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(2) Need reforms in judiciary - mitigate vacancies, dispose 3 crores pending cases etc

(3) Constituted too often - legislator cases, child sexual crimes, mob lynching etc. This dilutes focus too much.

(4) ~~Doesn't seem to have~~
Not constituted by states timely. SC has repeatedly demanded legislator cases to be disposed by such courts.

Thus the option is exploited too often without corresponding result in more offences. It leads to administrative overhead and diverts attention from other cases.

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3. Highlight the challenges faced by lower judiciary in India and suggest measures for enhancing their productivity. **(150 words) 10**

भारत में निचली अदालतों द्वारा सामना की जाने वाली चुनौतियों पर प्रकाश डालिए और उनकी उत्पादकता को बढ़ाने हेतु उपायों का सुझाव दीजिए।

Lower judiciary in India is criticised for pendency of cases (> 2 crore cases) and corruption.

Challenges:

1. High number of vacancies in judge (~5000/22000)
2. Frequent adjournments
3. Poor infrastructure (court rooms, waiting rooms, residences etc)
4. Poor scheduling of cases
5. Prevalent culture of bribery and corruption

Measures to enhance productivity:

1. Judges can be recruited by an All India Judicial Service for timely

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and meritorious appointment (ARC 2)

(2) MBA degree holder court managers to identify flaws and ensure scheduling is effective.

(3) Investment in infrastructure.

(4) High Courts need to mentor/handhold subordinate judiciary for developing culture of excellence.

(5) Steps towards witness protection and scientific investigation (police reforms) would ensure frequent adjournments are less.

(6) Strategy to manage pending cases and dispose them off as soon as possible.

Justice delayed is justice denied. And subordinate judiciary is first point of hearing for common man. Urgent reforms are need of the hour.

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4. Assess the need to formalise the process of post-legislative scrutiny to improve the effectiveness of laws. **(150 words) 10**

कानूनों की प्रभावशीलता में सुधार के लिए विधि-निर्माण पश्चात् संवीक्षा की प्रक्रिया को औपचारिक बनाने की आवश्यकता का मूल्यांकन कीजिए।

~~The laws are made~~

Laws are criticised for being too many, vague, ineffective.

(1) There are over 44 laws for labour, numerous income tax laws. This leads to confusion, misuse etc.

(2) ~~Def~~ Laws like sedition, defamation, etc have poorly defined terms. This gives scope for misuse by govt

(3) At times, laws are made as knee jerk reaction to crisis. They are later misused / ineffective.

In light of above reasons, there is a need to assess the need and the effectiveness of laws made

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by legislature. A post-legislative scrutiny could perform PLIA (policy and legislation impact and assessment) and enable the same.

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5. Discuss the potential of Artificial Intelligence (AI) in improving the effectiveness of e-governance in India. **(150 words) 10**

भारत में ई-गवर्नेंस की प्रभावशीलता में सुधार लाने में कृत्रिम बुद्धिमत्ता (AI) की क्षमता की विवेचना कीजिए।

AI enables quick and effective decision making, based on huge amount of data. It is hailed as 4th industrial revolution, but also has tremendous potential in e-governance (NITI Aayog's paper on AI):

① Agriculture: timely dissemination of data on crops to cultivate, fertilised amounts (based on Soil Health Card data)

② Health care: use of health data (eg: National Health Stock) to identify regions faltering in nutrition, diseases etc.

③ Timely escalation of grievances ~~redressal~~ if not redressed by official. Performance scores of officials could be determined by AI to eliminate bias.

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(4) Scheduling of cases in judiciary, organise government litigation

(5) Organise data collected by agencies, NGOs etc for insights and trends.

Thus there is huge potential for using AI in e-governance. However we require timely and organised data collection and digital infrastructure to implement the same.

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6. Despite various reforms in the public grievance redressal mechanisms, their effectiveness remain limited. Discuss. **(150 words) 10**
लोक शिकायत निवारण प्रणाली में विभिन्न सुधारों के बावजूद, उनकी प्रभावशीलता सीमित बनी हुई है। चर्चा कीजिए।

India has introduced several public grievance redressal mechanisms to bring transparency and accountability into governance.

(1) RTI, 2005 to enable suo moto information sharing and public access to governance information and decisions.
But queries are not answered timely or completely, many agencies have not appointed PIOs, crucial agencies outside purview (political parties etc)

(2) Lokpal, 2013: for receiving public complaints against officials.
But a Lokpal was appointed over 5 years later. He lacks suo moto powers, investigative powers, has intransparent

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~~rules~~ rules for corruption against PM

(3) Citizen charters were introduced for greater empowerment and accountability to citizens.

But they have become pious declaration of noble ideals (2nd ARC) and lack enforcement.

(4) Whistleblower resolution passed but not yet operationalised. Prominent whistleblowers like SK Dubey, 40+ persons in Vyapam case killed as their identity leaked out.

Thus there is a need to effectively operationalise the mechanisms and bring timely reforms to implement them in letter and spirit.

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7. Explaining the factors that contribute to trafficking of women and children in India, highlight the steps taken in recent times to combat it. **(150 words) 10**

भारत में महिलाओं और बच्चों की तस्करी में योगदान देने वाले कारकों की व्याख्या करते हुए, इससे निपटने के लिए हाल के दिनों में उठाए गए कदमों पर प्रकाश डालिए।

Trafficking refers to forceful transport and selling of humans. This is usually done for begging, sexual occupations etc.

Factors contributing:

① Rampant poverty forces family to "sell" some family members.

② Illegal sexual occupations - brothels, dance bars etc - buy trafficked women for lucrative prices

③ Organised begging network - more sympathy for women and children means they earn more.

④ Lax implementation of laws, unscientific investigations fail to deter it.

⑤ Women and children are most vulnerable - unable to defend themselves - and hence likely to be trafficked.

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Article 23 of Constitution bans human trafficking. Recent ~~as~~ steps:

1. Swadhar homes for abandoned ~~to~~ women.
2. Child shelters, setup for caring for abandoned, orphaned children
3. Trafficking of persons bill pending in Parliament.
4. Installation of CCTVs, surveillance of airports etc for illegal/forced transport.
5. Initiatives like Khoya Paya portal for lost children.
6. UN Convention against Trafficking signed.

Trafficking is a grave humanitarian offence and adequate steps must be taken to curb it.

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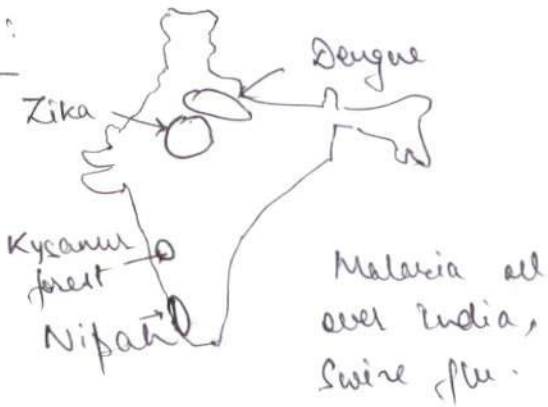
(इस भाग में कुछ ना लिखें)

8. With Vector-Borne Diseases (VBDs) reaching epidemic proportions in India, highlight the factors that have led to their emergence. Also, suggest some measures for their effective control and management. **(150 words) 10**

भारत में रोगाणुवाहक-जनित रोग (VBDs) महामारी की तरह उभरकर सामने आये हैं, अतः उन कारकों को रेखांकित कीजिए जिनके कारण इनका उद्भव हुआ है। साथ ही, इनके प्रभावी नियंत्रण और प्रबंधन हेतु कुछ उपायों का भी सुझाव दीजिए।

Vector borne diseases have grown to worrying proportion in India.

Factors for emergence:




(1) Habitat destruction increases stress and viral load in vectors eg: Nipah, Kysanur forest disease.

(2) Lack of sanitation and hygiene provides breeding space for vectors. eg: mosquitos and house flies.

(3) Increasing migration (domestic and international) raises the stakes. eg: ebola virus originated in middle east and quickly spread over most parts.

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Measures for effective control:

(1) Proactiveness on part of doctors to send unusual case samples to research laboratories. Nipah was thus identified within 2 cases.

(2) Farm and pet animals should be vaccinated timely, sick animals be separated and culled, if needed.

(3) Surveillance measures for every disease based on ICT, to check spread.

(4) Proper environment impact assessment of infrastructure projects, minimise deforestation.

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9. After years of neglect, rapidly evolving regional strategic realities are now forcing India and Indonesia to coordinate their policies ever more closely. Discuss. **(150 words) 10**

वर्षों की उपेक्षा के बाद, तेजी से विकसित हो रही क्षेत्रीय रणनीतिक वास्तविकताएं अब भारत और इंडोनेशिया को और अधिक घनिष्ठता से अपनी नीतियों को समन्वित करने के लिए बाध्य कर रही हैं। चर्चा कीजिए।

India and Indonesia established relations in aftermath of decolonisation (1950s). But they have remained lukewarm.

With rapid growth of China in neighbourhood, artificial islands created in South China Sea and islands being illegally occupied, China threatens free and open passage of goods in the region.

The above has brought India and Indonesia on the same side:

1. India has military presence in Sabang port.
2. They participate in war games. eg: Milan forment.
3. Indonesia sees India as a balance to Chinese dominance in RCEP.

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(4) Both envisage a free and open Indo-Pacific region, governed by rules.

With a similar mindset, relations between the two have grown. This has reflected in ASEAN vision statement acknowledging Indo-Pacific concept.

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**10.** Despite several attempts at resetting the ties, various barriers continue to be a cause of concern in the India-Nepal bilateral relations. Discuss.
**(150 words) 10**

संबंधों को पुन: स्थापित करने के कई प्रयासों के बावजूद, भारत-नेपाल द्विपक्षीय संबंधों में विभिन्न अवरोध निरंतर चिंता का कारण बने हुए हैं। चर्चा कीजिए।

India-Nepal are age-old allies, beginning with friendship treaty in 1954. The relations today have been stressed.

There have been various attempts to reset them, through frequent visits of Indian PM Modi and their Prime Minister, and constituting alternate coordination groupings - BRIN, BIMSTEC etc.

Yet barriers continue:

① Nepal perceives india as big brotherly - eg. water management

② Increasing Chinese investments in region. eg: railway across Tibet to Nepal.

③ Nepalese opposition parties raise anti-Indian voice.

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(4) Indian structural reforms - demonetisation and GST hurt Nepal. They have refused to recognize high denomination currency notes.

(5) The new Constitution of Nepal and discrimination of Madhesi women created tensions.

(6) China card is played by Nepal to ~~get~~ ask for more favours. eg: port access

(7) Nepal declined to participate in India-led ~~for~~ BIMSTEC exercise - Milan, yet participated in Sagarmatha with China.

Thus the relations have worsened but these can be brought down bilaterally by adequate dialogue mechanisms.

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**11.** Delineate the differences between pressure groups and interest groups. Citing examples, elaborate on the ways in which pressure groups influence government decisions and policy making in India. **(250 words) 15**

दबाव समूहों और हित समूहों के मध्य अंतर का वर्णन कीजिए। उदाहरणों को उद्धृत करते हुए, उन तरीकों का सविस्तार वर्णन कीजिए जिनके माध्यम से दबाव समूह भारत में सरकारी निर्णयों और नीति-निर्माण को प्रभावित करते हैं।

Pressure groups are political groups formed to pressurise government into acting on their grievances, without actively working towards acquiring power. eg: sugarcane farmers.

Interest groups on the other hand are socio-economical groups that may be interested in a particular policy or law. eg: transgenders are an interest group for the Transgender Persons bill

Ways of pressure groups:-

(1) They support candidature of persons that suit their ideologies. eg: PM Modi enjoyed support of corporates for his business reforms – Make in India etc.

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(2) They pressurise officials / ministers in power through lobbying. eg: automobile makers managed to turn govt stance from anti-hybrid vehicles to pro-hybrid vehicles through intense lobbying.

(3) They build popular opinion in their favour through debates, speeches, editorials etc.

(4) They organise protests etc to communicate their dissatisfaction and draw attention. eg: farmer rallies in Mumbai.

Thus, by use of above mechanisms, pressure groups voice their concerns and achieve their goals.

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Don't write anything this margin (इस भाग में कुछ ना लिखें)

**12.** Highlighting the issues faced by the institutions of local self governance in India, suggest measures that can be taken to improve their effectiveness in the delivery of public goods and services at the grassroot level.

**(250 words) 15**

भारत में स्थानीय स्व-शासन की संस्थाओं द्वारा समाना की जा रही समस्याओं पर प्रकाश डालते हुए, जमीनी स्तर पर सार्वजनिक वस्तुओं और सेवाओं के वितरण की प्रभावशीलता में सुधार लाने हेतु किए जा सकने वाले उपायों का सुझाव दीजिए।

Institutions of local self governance were setup under 73rd and 74th constitution amendment acts, to deepen democracy to grass roots.

Issues faced:

1. Lack of devolution of funds, functions and functionaries by state govt.
2. Unwilling / unable to exercise taxation powers, more so in ~~urb~~ rural areas
3. Low / no taxation results in low citizen interest and participation (2nd ARC).
4. Dependent on grants-in-aid for 90-95% of need (curse of ~~grant~~ aid)

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(5) State finance commission not constituted timely, bureaucratised, recommendations ignored.

(6) Elections delayed (Tamil Nadu has elections due for 2 years)

(7) Lack of adequate infrastructure and connectivity (in more than 20% panchayats)

(8) Officials temporarily posted from state, not committed to empowering them.

(9) Panchayats dependent on bureaucrats for getting work done

(10) Low levels of literacy and professionalism in rural areas.

(11) Failure to attract eminent experts, alternate bodies (like SPV for smart city).

Measures to improve effectiveness:

(1) Funding concerns: adequate devolution through timely constitution of SFC, flexible grants, raise money through bonds

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(eg: Indore), exercise ~~revenue~~ taxation powers.

(2) Investment in infrastructure (eg: Digi Gaon, Bharat net).

(3) Streamline procedures, attract eminent personalities, focus on spatial planning.

(4) SPVs (Special Purpose Vehicles) should be avoided in schemes unless absolutely needed.

(5) Timely elections, needed

(6) Effective trainings, nominate experts/NP, to foster professionalism and excellence.

These measures will truly bring government to the masses ie deepen democracy and realise Gandhi's dreams of self governed villages.

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**13.** The recent amendment to the Right to Information Act, 2005 will weaken the act and undermine the authority of Information Commissioners. Discuss. **(250 words) 15**

सूचना का अधिकार अधिनियम, 2005 में हालिया संशोधन इस अधिनियम को कमजोर बनाएगा और सूचना आयुक्तों के प्राधिकार को क्षीण करेगा। चर्चा कीजिए।

RTI act was passed to bring transparency and accountability in governance. It has been crucial in empowering citizens and exposing scams (like 2G scam).

Recent amendment:

- Terms of service to be decided by President, instead of being at par with SC judges.

Impact:

1. The amendment will lead to political interference in the office.
2. Lower ~~wages~~ salaries will fail to attract quality talent to the office.

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Additionally, BN Srikrishna's proposal to ~~ig~~ avoid disclosure when public officials interests are sufficiently at stake. This will further violate the sanctity of office.

Overall, the amendment is regressive and should not be operationalised.

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Don't write anything this margin (इस भाग में कुछ ना लिखें)

**14.** Highlight the process of delimitation in India. Also, throw light on the debates surrounding the delimitation exercise in India. **(250 words) 15**

भारत में परिसीमन की प्रक्रिया को रेखांकित कीजिए। साथ ही, भारत में परिसीमन की प्रक्रिया को लेकर होने वाले वाद-विवादों पर भी प्रकाश डालिए।

Delimitation is the process of ~~marking~~ dividing a territory into constituencies for purpose of elections, on the basis of census. Thus India is divided into 543 constituencies for Lok Sabha elections.

In India, this process is carried out by a Delimitation Commission (DC) constituted by Parliament every 5 years. (Constitutional body). DC considers census data to divide territory into constituencies of equal population. Its decisions cannot be questioned in any court of law.

Debates surrounding delimitation:

① The current allocation of seats to states and UTs in Lok Sabha is

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based on 1971 census. The states that have controlled their population effectively (southern, western India) want status quo, while states in north and east want fresh delimitation.

A fresh delimitation will increase seats for states like UP, Bihar by 30% compared to current. It will reflect ground realities, but unfair to states that effected population management.

(2) The delimitation of a territory for Panchayat elections has been mired in controversy - accused of being politically motivated. Unfortunately this cannot be questioned in judiciary.

Thus there is a need to visit the question of census data. ~~Pec~~ There is a need to adopt latest census data keeping in mind

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that northern states have huge population burden and ignoring it will only widen the gap. Perhaps a ~~provision~~ small penalty can be considered based on population growth (similar to Finance Commission recommendations).

Similarly, there is need to ensure impartiality and neutrality in Panchayat delimitations.

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**15.** Self Help Groups (SHGs) are vehicles of rural development, which help in the upliftment of marginalized groups. Elucidate. Further, mention the constraints faced by SHGs and how they can be addressed. **(250 words) 15**

स्वयं सहायता समूह (SHGs) ग्रामीण विकास के वाहक हैं तथा ये हाशिए पर मौजूद समूहों के उत्थान में सहायता करते हैं। स्पष्ट कीजिए। साथ ही, SHGs द्वारा सामना की जा रही बाधाओं का उल्लेख कीजिए। इन बाधाओं को कैसे दूर किया जा सकता है।

SHGs are group of 5-7 people from similar socio-economic background for common economic upliftment.

Vehicles of rural development:

1. Can start small business by pooling together household savings.
2. Banks willing to lend at lower rates to them, as opposed to an individual.
3. Easier to learn new skills in group.
4. Lower risk per person in case of failure
5. Stronger voice in dealing with clients, other businesses and leaders.
6. Can undertake social reforms like toilet construction, awareness campaigns etc.

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In particular, SHGs ~~have~~ are crucial for empowerment of women, SCs, STs etc. These communities have weaker voice as individual and benefit tremendously in SHG. eg:- papad ~~de~~ SHGs in Haryana.

Constraints faced by SHG:

1. Trust deficit among villagers.
2. Banks unwilling to lend to them (lack of many success stories)
3. Difficult to compete with large firms (economies of scale).
4. Poor technology, under skilled.
5. Lack of adequate branding and marketing.
6. Women lack cash in hand, this increases difficulty.

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How to address constraints:

1. Adequate formal credit and financial inclusion (eg: micro finance banks, Mudra etc)
2. Skill development and vocational training (PM Kaushal Vikas Yojana etc)
3. Helps in branding through geographical indicators etc
4. Promote SHG culture - PM Yuva Sahkar Cooperative Yojana.
5. Technology upgradation initiatives (like SFURTI for MSMEs).

~~Issue need~~

SHGs have huge potential, as seen in Kerala (Kudumbshree) and Haryana. Sustained efforts are required.

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**16.** With construction of toilets being only one part of the solution for a clean India, it is time that the Swachh Bharat Mission puts more emphasis on the other facets as well. Discuss. **(250 words) 15**

शौचालयों का निर्माण स्वच्छ भारत के समाधान का केवल एक भाग है, अतः अब समय आ गया है कि स्वच्छ भारत मिशन अन्य पहलुओं पर भी अधिक बल दे। चर्चा कीजिए।

Swachh Bharat Mission was launched in 2015 to make India Open Defecation Free (ODF) and sanitation and cleanliness.

Under the scheme, 9 crore toilets have been built across India - community and private. As a result, >27 states and all UTs have been declared ODF.

At the same time, need to address other dimensions:

(1) Toilets constructed but usage remains low. People prefer going in open, due to habit of years, lack of water in toilets etc.

Therefore need for continued maintenance of toilets together with behavioural

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change (through felicitations, incentives etc) through nudge economics needed.

(2) As ODF target is achieved, we need to become ODF+ (no urine in public) and ODF++ (proper sewage management). CPCB admits that most cities lack adequate sewage connectivity and disposal.

There are required on priority else sewage will swamp farms, towns and wet lands.

(3) The outbreaks of dengue etc are indicators of poor sanitation and cleanliness. Delhi govt has been running an effective campaign on this.

The initial momentum of Swachhta hi Seva needs to be sustained. This would ensure dignity to sweepers, clean

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surroundings and prevent outbreaks.

(4) Reports of manual scavenging continue (1 death per week). Insanitary dry latrines have not been eradicated.

Need to provide safety gear, technology like robots ~~to~~ and adequate implementation of law.

(5) Piped drinking water to all (Swajal mission)

We should understand that toilets are but one component. They should be used, simultaneously need to ~~the~~ work on other dimensions.

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**17.** Highlight the salient features of Mission Indradhanush. What are the challenges that the mission is facing in its implementation? Suggest measures to address these challenges for progressing towards full immunization coverage. **(250 words) 15**

मिशन इन्द्रधनुष की प्रमुख विशेषताओं पर प्रकाश डालिए। इसके कार्यान्वयन में मिशन को किन चुनौतियों का सामना करना पड़ रहा है? संपूर्ण टीकाकरण प्राप्ति की दिशा में प्रगति करने हेतु इन चुनौतियों को दूर करने के उपायों का सुझाव दीजिए।

Immunisation coverage in India stagnated at 64% in 2014, rising by 1% each year. So, Mission Indradhanush was launched. ~~for universal coverage for~~

Salient features:-

① Universal immunisation coverage by 2020

② 7 diseases covered - Diptheria, Tuberculosis, Polio, Measles, Rubella, etc.

Given the rapid progress, it was renamed to Mission Intensified Indradhanush - more diseases added and target pre-poned to December 2018.

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Challenges in implementation:

(1) Anti-vaxxers' rise in mentality that vaccines are useless, cause autism etc.

(2) Perceived by minority community as attempt to forcefully sterilise them.

(3) Some vaccines are expensive and require cold storage throughout.

(4) Vaccines like MR vaccine have reactionary effects (vomitting, fever etc). There is resistance among parents.

(5) Lack of awareness among parents in rural areas about importance of vaccines.

(6) Incidents of cVDPV and VAPV have increased distrust among masses.

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Measures to address

① Awareness :

→ Engage celebrities (like Amitabh Bachchan for polio), eminent doctors and universities.

→ Highlight that vaccination is a universal exercise (ignoring caste, religion etc)

→ Leverage ASHA, Anganwadi workers

② Capacity building:

→ Cold chain for safety, prevent virulence

→ Create reach among villages

③ Surveillance of vaccination status using ICT, understand and spread alerts about side-effects.

Vaccination is the cheapest way of preventive healthcare. No holds must be barred to achieve universal immunisation

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**18.** Assess the importance of skilling in light of changing economic and demographic structure in India. In this regard, how far has the Skill India Mission succeeded in its mandate. **(250 words) 15**

भारत में बदलती आर्थिक और जनसांख्यिकीय संरचना के आलोक में कौशल सृजन के महत्व का मूल्यांकन कीजिए। इस संबंध में, स्किल इंडिया मिशन अपने अधिदेश में कितना सफल रहा है।

95% of Indian workforce lacks formal skilling. Future of Jobs report (WEF) estimates >50% will require reskilling to meet changing needs.

In above context, skilling becomes quite important. Further agrarian growth is unreliable (varying from 20% year-on-year to negative), prompting communities to move out into manufacturing.

With huge demographic dividend (set to continue till 2050 - UNFPA), we need to skill them to ensure they avail better economic opportunities as well as power India to a $5 trillion economy by 2022.

Finally, skilling would turn job seekers into job creators through MSMEs, SHGs

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etc.

The above reasons clearly show importance of skilling in India. Hence Skill India mission was introduced to impart formal skill to all, and recognize prior skills (as per NSQF).

Shortcomings:

1. Work-structure in India does not correspond to skilling
2. Funds are too ~~s~~ less given the huge population target.
3. Too many Sectoral Skill Councils (~~one for~~ separate ones for apparel, handicraft etc) dilute focus (Sharda Prasad panel)
4. Disconnect between skilling and industry requirement
5. ITIs (Industrial Training Institutes) are lacking personnel and quality, have regional disparity etc

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(6) Shortage of formal jobs discourages workers.

(iii)

Despite these shortcomings, Skill India has skilled millions and enabled them to achieve their full potential. Sustained efforts along with steps to address the challenges are needed.

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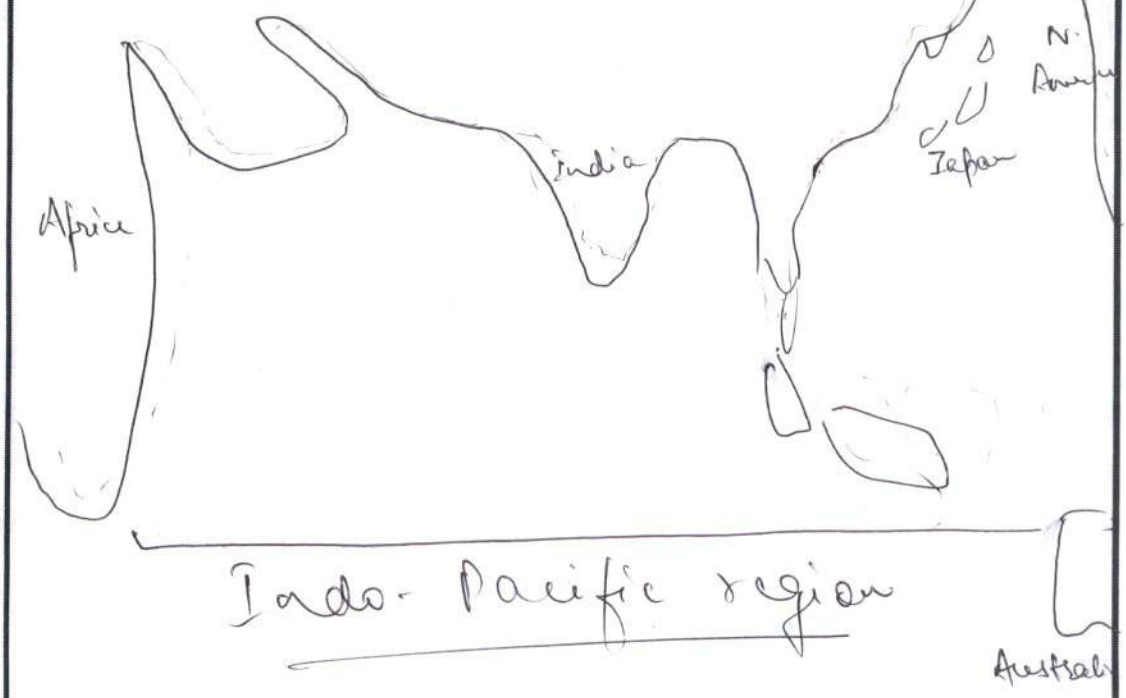
**19.** What according to you are the reasons that motivated India to create a dedicated Indo-Pacific division in the MEA recently? Also, highlight the challenges for India in the Indo-Pacific region. **(250 words) 15**

आपके अनुसार वे कौन-से कारण हैं जिन्होंने हाल ही में भारत को MEA के तहत एक समर्पित भारत-प्रशांत प्रभाग सृजित करने के लिए प्रेरित किया? साथ ही, भारत-प्रशांत क्षेत्र में भारत के समक्ष चुनौतियों पर भी प्रकाश डालिए।

The Indo-Pacific region has become part of discourse and grown in importance




Reasons:

① 50% of global oil trade and 15% global trade passes through the region.

② US has raised the importance - ARIA act, renamed Pacific command to IndoPacom.

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(3) Chinese growth ~~has~~ and predatory economics through BRI.

(4) Presence of global powers - US (Diego Garcia), China (Djibouti, Hambantota), France (Reunion islands) etc.

(5) Increased cooperation between nations on rim of Indo-Pacific. eg: IORA, IONS, RIMES etc.

~~(6) Free and rules based order in the region threatened by China creating artificial nation~~

Thus the region has grown in importance and India is at the helm of it. Any progress or disruption will affect India directly. So it makes sense to create a dedicated block in MEA.

Challenges for India:

(1) Chinese infrastructure approach could strangle India (string of pearls). It's cheap

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and flexible funding has excluded India in its neighbourhood.

(2) Piracy and terrorism are manifest in the region.

(3) Indian initiatives like Asia Africa Growth Corridor, Kaladan multimodal, highway in Bangladesh have seen slow implementation.

(4) India's maritime security architecture lacking in minor ports, etc.

(5) India's strategic initiatives like Agalega island, Assumption island have faced local opposition and stalled.

(6) India's ports require urgent overhaul to engage higher amount of goods - in particular the minor ports.

India has great connect with most countries in Indo-Pacific based on democratic values and South-South cooperation. There need to be used to overcome challenges.

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**20.** For SCO to become a successful regional grouping, it has to overcome bilateral differences between its members and their respective geopolitical calculations. Comment. Also, discuss the role that SCO can play in enhancing India's interest in the Eurasian region. **(250 words) 15**

SCO को एक सफल क्षेत्रीय समूह बनने हेतु, अपने सदस्यों के मध्य के द्विपक्षीय मतभेदों और उनके संबंधित भू-राजनीतिक अपेक्षाओं से उबरना होगा। टिप्पणी कीजिए। साथ ही, यूरेशियाई क्षेत्र में भारत के हितों को बढ़ाने में SCO द्वारा निभाई जा सकने वाली भूमिका की भी विवेचना कीजिए।

SCO is regional grouping of China, Russia, India, Pakistan, Kazakhstan, Tajikistan, Uzbekistan, Kyrgyzsthan, for cooperation in security, economic, cultural domains.

Need to overcome bilatral differences:-

① India-Pak relations are hostile due to terrorism sponsored by Pakistan and its anger at India recognising Kashmir.

② Indo-China relations lack trust due to Chinese predatory economics in IOR and string of pearls.

③ China-Russia relations have eased after West imposing sanctions on latter, trade were with China. But they are far from coordial.

④ Central Asian countries lack political stability and their relations among themselves are

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distrustful.

(5) Both Russia and China are wary of Pakistan's closeness to US (eg: Kashmir issue).

Thus the different geopolitical interests of countries and bilateral differences are holding back SCO.

Importance for India in Eurasian region:

(1) Central Asia can act as link to Europe and Russia by extending Zaranj-Zahedan-Delaram linkage. SCO facilitates India's interactions with central Asia.

(2) India eyes markets of central Asia, along with rich reserves - uranium, gas, metals etc. These will be accessible by way of SCO.

(3) SCO can enable regional peace and stability (in light of instability in Afghan).

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(4) SCO ~~can~~ enables India to interact with major countries in region - China and Russia.

(5) SCO furthers India's anti-terrorism stance through permanent RATS.

Therefore SCO goes well with India's interests in the region, in particular connectivity to Eurasian region.

128

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## GENERAL STUDIES (TEST CODE : 1438)

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| Medium Eng./Hindi | ENGLISH. | Registration Number | 660223 |
| Center | | Date | 12.08.2019 |

### INDEX TABLE

| Q. No. | Maximum Marks | Marks Obtained |
|---|---|---|
| 1 | 10 | |
| 2 | 10 | |
| 3 | 10 | |
| 4 | 10 | |
| 5 | 10 | |
| 6 | 10 | |
| 7 | 10 | |
| 8 | 10 | |
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| 11 | 15 | |
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| 14 | 15 | |
| 15 | 15 | |
| 16 | 15 | |
| 17 | 15 | |
| 18 | 15 | |
| 19 | 15 | |
| 20 | 15 | |

**Total Marks Obtained:**

**Remarks:**

### INSTRUCTIONS

1. Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code).
   उत्तर पुस्तिका में सूचनाएं भरना आवश्यक है (नाम, प्रश्न–पत्र कोड, विद्यार्थी क्रमांक आदि)।
2. There are **TWENTY** questions printed in **ENGLISH & HINDI**
   इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।
3. **All questions are compulsory.**
   सभी प्रश्न अनिवार्य हैं।
4. The number of marks carried by a question/part is indicated against it.
   प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
5. Answers must be written in the medium authorized in the Admission Certificate, which must be stated clearly on the cover of this Question-Cum-Answer (QCA) Booklet in the space provided. No marks will be given for answers written in medium other that the authorized one.
   प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहिए जिसका उल्लेख आपके प्रवेश पत्र में किया गया है और उस माध्यम का स्पष्ट उल्लेख प्रश्न–सह–उत्तर (क्यूसीए) पुस्तिका के मुख्य पृष्ठ पर अंकित निर्दिष्ट स्थान पर किया जाना चाहिए। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में लिए गए उत्तर पर कोई अंक नहीं मिलेंगे।
6. Word limit in questions, if specified, should be adhered to.
   प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
7. Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off.
   उत्तर पुस्तिका में खाली छोड़ा हुआ पृष्ठ या उसके अंश को स्पष्ट रूप से काटा जाना चाहिए।

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# EVALUATION INDICATORS

1. Contextual Competence
2. Content Competence
3. Language Competence
4. Introduction Competence
5. Structure - Presentation Competence
6. Conclusion Competence

**Overall Macro Comments / feedback / suggestions on Answer Booklet:**

1.

2.

3.

4.

5.

6.

**All the Best**

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1. By rebalancing project risks between the public and private sectors, the HAM model has encouraged investments in the road infrastructure sector. Discuss. **(150 words) 10**

सार्वजनिक और निजी क्षेत्रकों के मध्य परियोजना जोखिमों को पुनर्संतुलित कर, HAM मॉडल ने सड़क अवसंरचना क्षेत्रक में निवेश को प्रोत्साहित किया है। चर्चा कीजिए।

Road infrastructure projects in india suffer inordinate delays owing to land acquisition delays, inappropriate financing models, clearance delay etc. Until recently, EPC (Engineer-Procure-Create) and BOT (Build Operate Transfer) were prevelant models.

Drawbacks:

① Under EPC, the government provided the entire funds that a contractor need for the project. But mobilising such huge funds are a burden for government and often lead to delays, and pose risk if contractor failed to perform.

② Under BOT, the onus for funds lay entirely on the contractor. But banks were unwilling to provide such huge loans, or charged high rates driving up costs. NPAs exacerbate this issue.

HAM (Hybrid Annuity Model) provides the best of both worlds by placing onus for 60% of funds on contractor while government provides 40% of funds on a milestone basis.

Thus the contractor finds it easier to raise a smaller amount, and government is happier with lower exposure to risk.

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(इस भाग में कुछ ना लिखें)

HAM has proven an appropriate model given the huge risks of cost and time over runs. The government has readily worked towards single window clearances, while contractor has moved towards speedier implementations.

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**2.** Examine the need for a comprehensive policy on e-commerce in view of its domestic expansion as well as safeguarding India's interests globally.
**(150 words) 10**

ई-कॉमर्स पर एक व्यापक नीति की आवश्यकता का इसके घरेलू विस्तार के साथ-साथ वैश्विक स्तर पर भारत के हितों की सुरक्षा को देखते हुए परीक्षण कीजिए।

E-commerce sector in India has seen rapid growth recently with large players like Flipkart, Amazon etc and larger number of small players.

Domestic interests

① E-commerce has been disruptive in connecting small businesses with customers.

② In particular, traditional handicrafts, ~~and~~ embroidery, paintings etc are finding customers in distant regions.

③ E-commerce is driving logistics industry with focus on reducing both time and cost.

But the predatory discounts coupled with exclusive sales have made the landscape tilted towards large e-commerce giants with deep pockets.

India's global interests:

① E-commerce giants like Amazon and ~~Flip~~ Walmart are American companies. Recent measures to level the playing ground have invited US's wrath (GSP withdrawal etc).

② With data breaches ~~on~~ and concerns of data security rising, data localisation norms as recommended by BN Srikrishna panel could further

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add tension in ties with US.

Given the important domestic role and the stakes at international role, a comprehensive policy will ~~too~~ bring in transparency and reliability and enable systematic pursual of India's interests.

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3. Explaining the reasons behind India's lower female labour force participation rates (LFPR), list the steps that have been taken to augment it. What more needs to be done? **(150 Words) 10**

भारत की निम्न महिला श्रमबल भागीदारी दर (LFPR) के पीछे उत्तरदायी कारणों को स्पष्ट करते हुए, इसे बढ़ाने हेतु उठाए गए कदमों को सूचीबद्ध कीजिए। साथ ही, बताइए कि इस दिशा में और क्या किए जाने की आवश्यकता है?

NSSO's latest PLFS report indicates a dismal 18% LFPR for females.

Reasons:

1. Socio-cultural norms that discourage women from going outside the home and working.
2. As family incomes are rising, women are expected to sit at home and take care of the family.
3. The increased penetration of education has led to women increasingly opting for higher education instead of work.
4. The lack of adequate safety norms and rising rape statistics discourage women and families.
5. Women are further discouraged from travelling far away, and public transport has poor penetration (except in metro cities). This limits economic opportunities.

Steps taken:

1. Improved maternity leave (12 weeks → 26 weeks), mandatory creche facilities etc.
2. Mandatory Internal Complaint Committees as per

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Sexual Harassment at Workplace Act etc.

(3) Steps to promote women entrepreneurship - Standup India, women SHG promotion (eg: Kudumbshree) etc.

(4) Distribution of rape kits to police, increased patrolling, surveillance, death penalty to heinous rape etc.

This has helped but we need sustained efforts along with behavioural change in patriarchal society, sensitisation of police, women scholarships etc.

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4. The cropping pattern of a region is influenced by geo-climatic, socio-cultural, economic, historical and political factors. Substantiate with relevant examples. **(150 words) 10**

किसी क्षेत्र का शस्य प्रतिरूप भू-जलवायविक, सामाजिक-सांस्कृतिक, आर्थिक, ऐतिहासिक और राजनीतिक कारकों से प्रभावित होता है। प्रासंगिक उदाहरणों के साथ पुष्टि कीजिए।

India has a diverse cropping pattern ranging from water intensive paddy in plains, plantations in higher altitudes to dryland agriculture in ~~other~~ arid regions.

Influence of factors:

① Geo-climatic: The northern plains have fertile alluvial soil and ~~aq~~ adequate rain for paddy, jute, sugar cane etc. While Gujarat and Maharashtra see jowar, bajra, ragi etc. (temperature, rainfall, type of soil, terrain etc).

② Socio-cultural: The fragmentation of land holdings due to division of family land has forced subsistence farming. ~~Fro~~ On the other hand, traditional practices like Pokkali paddy (Kerala) add tremendous value to farms.

③ Economic: Paddy and wheat are readily procured and offer remunerative returns. Thus farmers in north west India grow paddy and farmers in Marathwada grow sugarcane despite water scarcity.

④ Historical: Farmers in Bihar were familiar with cash crops owing to indigo plantations. Thus they readily took to cash crops like jute, sugarcane that are grown even today.

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(5) Political: Sugarcane continues to fetch high ~~see~~ procurement prices (SAPs) due to sugarcane farmer pressure groups. This incentivises sugarcane cultivation, often in areas of low rainfall (eg: western UP) and for more than demand.

We thus see that a complex mix of various factors decide what cropping patterns are followed. However there is a need to rationalise them in light of water crisis and environmental damage.

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5. Reliance on borrowings for capital expenditure in railways reflects a weakening financial position. Comment on the statement and discuss ways in which better resource generation and utilisation can be achieved therein. **(150 words) 10**

रेलवे में पूंजीगत व्यय के लिए उधारी पर निर्भरता कमजोर होती वित्तीय स्थिति को प्रतिबिंबिति करती है। इस कथन पर टिप्पणी कीजिए और उन उपायों पर चर्चा कीजिए जिनसे इसमें बेहतर संसाधन सृजन और उपयोगिता प्राप्त की जा सकती है।

Railways are considered the lifeline of india for being the cheapest means for long distance transport of goods and people.

Concerns on financial position:

① At operating ratio of 92 paise/rupee, railways have low returns for investment.

② To keep the passenger fare low, freight fares have risen dramatically.

③ The portion of non fare revenue continues to be low.

Due to the above reasons, railways have no funds to undertake capacity upgradation (Kakodkar committee). Thus it has to resort to borrowings for capital expenditure ( ~~no~~ upgrade stations, improve signaling, electrification etc).

What to do?

① Passenger fares have remained unsustainably low. These need to be rationalized together with better fares to freight.

② The portion of non fare revenue (advertisements, lease out spaces at stations etc) needs to be

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increased (Bibek Debroy committee).

(3) Railways needs to outsource all but the core activities (eg: housing to employees).

(4) Domestic manufacturing will enable better utilisation of resources (eg: Train 18 at ICF).

(5) Analysis of feasibility of routes before beginning construction.

~~That~~ These measures will enable railways to perform their envisaged role while undertaking required upgrades in performance and safety.

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6. Montreal Protocol is often considered as the most successful international environmental treaty. Highlighting the achievements of the protocol, discuss the reasons for its success. **(150 words) 10**

मांट्रियल प्रोटोकॉल को प्राय: सर्वाधिक सफल अंतर्राष्ट्रीय पर्यावरण संधि के रूप में माना जाता है। इस प्रोटोकॉल की उपलब्धियों पर प्रकाश डालते हुए, इसकी सफलता के कारणों पर चर्चा कीजिए।

Montreal protocol, signed in 1989, was to counter the growing "ozone hole" over Antarctica.

Achievements:

1. Universal adoption among countries through ratification.
2. The countries brought in initiatives to curb relevant compounds (CFCs).
3. The most visible achievement was reports of the ozone ~~the~~ concentration going back to normal recently.

Reasons:

1. The "ozone hole" was ~~visibly~~ quantifiably visible. This lended credibility to the threat.
2.

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7. What are nano-pharmaceuticals? Mention their application and highlight the need for regulating the nano-pharmaceuticals in India. **(150 words) 10**

नैनो-फार्मास्यूटिकल्स क्या हैं? उनके अनुप्रयोगों का उल्लेख कीजिए और भारत में नैनो-फार्मास्यूटिकल्स को विनियमित करने की आवश्यकता पर प्रकाश डालिए।

Nano pharmaceuticals are nano level (< 100nm size) compounds that can be used to perform healthcare functions - diagnosis, treatment etc.

Applications:

① Targeted drug delivery: equipped with appropriate receptors, they can bind to exact site and improve efficacy of drugs released. Additionally, the drug release is continuous, decreasing side-effects and boosting efficacy. eg: liposomes.

② Diagnosis: With nanotechnology, "lab on chip" enables diagnosis of many syndromes with a single drop of blood. These are more portable and easy to handle.

③ Poison/radioactivity treatment: Nanoparticles like EDTA, C-60 can effectively trap unwanted molecules and bring them out. These see application in anti-radioactivity kits.

④ Gene editing: Gold nanoparticles act as excellent carriers for injecting desired genes into a target DNA ("magic bullets").

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Need for regulation:

① Being so small, they can cross the blood-brain barrier and result in unforeseen complications.

② Being expensive, they can worsen the divide in the society between have's and have not's.

③ The proliferation of nanoparticles can lead to waste management issue.

Thus nanopharmaceuticals offer a unique solution for healthcare but require effective regulation.

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**8.** Explain the concept of Chandrasekhar Limit and highlight its significance in the field of astronomy. **(150 words) 10**

चंद्रशेखर सीमा की अवधारणा की व्याख्या कीजिए और खगोल विज्ञान के क्षेत्र में इसके महत्व पर प्रकाश डालिए।

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9. India's internal security challenges are intricately linked with the security of the country's borders. Comment. **(150 words) 10**

भारत की आंतरिक सुरक्षा की चुनौतियां जटिल रूप से देश की सीमाओं की सुरक्षा से संबद्ध हैं। टिप्पणी कीजिए।

India's internal security challenges arise due to funds and arms funneling by hostile neighbours like China and Pakistan.

(1) 1984 secession in Punjab was fueled by ~~from~~ Pakistani support (anxious after loss of Bangladesh).

(2) LWE in central and eastern India are believed to be fueled by Chinese support.

(3) Mujaheedin crisis of Kashmir in 1990s was masterminded by Pakistan sending ISI handlers into India.

(4) Drug crisis in Punjab due to Pakistan's proxy war. Thus, FICN (fake Indian currency notes), arms, drugs etc are smuggled across porous borders with Pakistan or China. At times they are routed through a third country like Nepal, Bangladesh.

A comprehensive border security management system (like CIBMS) will go a long way in eliminating this smuggling. BOLD-QIT in Bangladesh borders enables all terrain surveillance using sensors. This could be followed along other borders of India as well.

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As the illegal movement of people, arms, currency is reduced, most internal security problems will automatically wither away.

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**10.** Bring out the importance of international cooperation in fighting terrorism. In this context, throw light on UN Global Counter-Terrorism Strategy.
**(150 words) 10**

आतंकवाद से मुकाबला करने में अंतर्राष्ट्रीय सहयोग के महत्व को रेखांकित कीजिए। इस संदर्भ में, संयुक्त राष्ट्र की वैश्विक आतंकवाद-रोधी रणनीति पर प्रकाश डालिए।

Terrorism is a truly international problem that is only getting worse (three times more people killed in last decade compared to the one before).

Importance of international cooperation:

① With ISIS, Al Qaeda demonstrating capability to strike nations while not leaving their home, information sharing is critical.

② Nations need to unite to curb terror financing and ensure other nations recognise terror organisations and place sanctions on them. eg: Pakistan

③ If nations work in isolation, a terrorist can simply escape to another country after committing an act and enjoy safe haven.

④ Developing nations need aid in security challenges to ensure their internal instability does not flow out as terrorism, like in Syria

UN Global Counter-Terrorism Strategy (UN GCTS) is a unique initiative to ~~identify~~ enable nations to come together and discuss terrorism. This has components of information sharing

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(Indian intelligence could have prevented Easter attacks in Sri Lanka), and agreement on organisations and individuals that need to be sanctioned.

Thus it offers a great opportunity to act together to counter terrorism, provided it gets the nations on a consensus.

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**11.** One of the goals that a developing economy aspires for is to bring down the Incremental Capital-Output Ratio (ICOR). In this context, what are the constraints that underlie the efficient conversion of savings rate to investments in the Indian economy? Also suggest some measures to improve this efficiency. **(250 words) 15**

एक विकासशील अर्थव्यवस्था जिन लक्ष्यों की आकांक्षा रखती है उनमें से एक वृद्धिशील पूंजी-उत्पादन अनुपात (इंक्रीमेंटल कैपिटल-आउटपुट रेश्यो: ICOR) में कमी लाना है। इस संदर्भ में, भारतीय अर्थव्यवस्था में बचत दर के निवेश में कुशल रूपांतरण के समक्ष आने वाली बाधाएँ क्या हैं? साथ ही, इस कुशलता में सुधार हेतु कुछ उपायों का भी सुझाव दीजिए।

Incremental Capital Output Ratio is a measure of efficiency in economy - how much capital is required per additional unit of output. Despite a healthy savings rate, investments are below par.

Constraints in Indian economy:

~~① Infrastructure constraints:~~

① Prevelance of black money: This untracked money drives consumption but ~~prevents efficient~~ it cannot be tracked. It prevents real policy-making.

② Tendency to invest in gold, real estate instead of financial markets. Gold drives up CAD while real estate is rife with black money, corruption.

③ Low financial inclusion (~40%) means a significant population holds their savings in cash. This makes them vulnerable to inflation and denies them financial services, while denying Indian economy the investment it needs.

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(4) BEPS, treaty shopping etc ~~dat~~ lead to profits being drained out of the country without even paying the tax on it.

Measures:

(1) Further financial inclusion and financial literacy. PM Jan Dhan Yojana opened 20 crore bank accounts but most are dormant. Unique awareness campaigns are needed to nudge behavioral change.

(2) Income declaration schemes were effective. Demonetisation mobilised black money in the economy but it remains to analyse the returns to identify those who are paying less returns.

(3) LOB has been introduced in DTAAs, GAAR have been framed to reduce BEPS. These need to be effectively implemented and monitored to identify effectiveness and improvements.

(4) Alternate investments like mutual funds, Real Estate Investment Trusts (REITs) need to be promoted so that money is invested transparently and economy receives investments.

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As a developing country, India is bound to have a savings-investment gap. But the gap is exacerbated by these inefficiencies. Effectively tackling them could put India on track for $5 trillion economy by 2024.

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**12.** Why has the contribution of manufacturing sector, as a percentage of the GDP, remained stagnant in the recent years? In this context, analyse the achievements of National Manufacturing Policy, 2011 with regards to its intended objectives. **(250 words) 15**

विगत वर्षों में GDP के प्रतिशत के रूप में विनिर्माण क्षेत्रक का योगदान स्थिर क्यों रहा है? इस संदर्भ में, इसके लक्षित उद्देश्यों के संबंध में राष्ट्रीय विनिर्माण नीति, 2011 की उपलब्धियों का विश्लेषण कीजिए।

As per Economic Survey 2018-19, the contribution of manufacturing continues to be 15% of GDP. This has been stagnant since late 1990s.

Reasons for stagnacy:

1. Infrastructure constraints: Erratic power supply, congested transport sector, poor connectivity in less urban regions.

2. Quality of labour: >95% labour lacks formal skilling of any kind. This translates to poor productivity.

3. Technological constraints: India continues to depend on imports for engineering goods. These are often not cutting edge, lowering competitiveness.

4. Red tapism: Despite liberalisation reforms, bureaucratic red tapism (lack of single window clearances), delays in permits etc stall industries.

5. Unstable policy regime: Government has faced frequent criticism for reverting on its policy stance. eg: stand on hybrid electric vehicles.

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(6) Land acquisition delays: Locals often see industries as encroaching on their lands, ignoring the economic benefits they bring. Politicians happily turn this into an issue. eg: Tata factory issue at Singur.

(7) Rising stiff competition from countries like Bangladesh, Vietnam on account of cheaper labour.

(8) Banks riddled with NPAs

Thus, all of these factors make Indian manufacturing less competitive and have prevented rise of manufacturing India.

National Manufacturing Policy, 2011, was launched with the following objectives:

(1) MSME promotion for manufacturing with aid in marketing, technology upgradation.

(2) Streamlining clearances and permits with shift towards single window clearances.

(3) NIMZs to be set up to promote liberalised norms for manufacturing.

The policy has achieved regular growth in manufacturing but has failed to achieve labour intensive growth.

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**13.** Elaborate the strategic and operational elements of the Agriculture Export Policy, 2018 and discuss the role it can play to achieve the target of doubling farmers' income by 2022. **(250 words) 15**

कृषि निर्यात नीति, 2018 के रणनीतिक एवं परिचालन-संबंधी तत्वों का सविस्तार वर्णन कीजिए और 2022 तक किसानों की आय को दोगुना करने के लक्ष्य को प्राप्त करने में इसके द्वारा निभायी जा सकने वाली भूमिका की विवेचना कीजिए।

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**14.** The contribution of coal based power generation is not expected to substantially go down in the next few decades, despite growing importance of renewables. Comment on the statement in light of increasing demand for power in India. **(250 words) 15**

नवीकरणीय संसाधनों के बढ़ते महत्व के बावजूद, कोयला आधारित विद्युत उत्पादन के योगदान में अगले कुछ दशकों में पर्याप्त कमी आने की उम्मीद नहीं है। भारत में विद्युत की बढ़ती मांग के आलोक में इस कथन पर टिप्पणी कीजिए।

India has committed towards generating 175GW renewable energy by 2022. This has been visible in:

① India champions the cause of solar energy through ISA, and has launched National Solar Mission for 100 GW solar target by 2022 (upgraded from 40GW).

② India has launched schemes like ~~Sou~~ Kusum (solarisation of pumps), Saubhagya (off grid solar for remote areas), Digi Gaon (solar street lighting etc).

~~③ India has been promoting biofuel based~~

③ The focus on small hydro plants has materialised in Shahpur Kandi, ~~Rang~~ Kishenganga etc. We are importing cheap hydro electricity from Bhutan.

④ India has been looking to increase gas based power plants (currently 7%) by importing from Qatar, Myanmar etc.

⑤ Civilian nuclear deals with France, Russia, Japan have resulted in nuclear plants set up

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all over India. Many more are upcoming - Gorakhpur, Mahi Banswada, Jaitpur etc.

(6) Through wind farms in Karnataka, Tamil Nadu, Gujarat, we are generating 11% of our power. ~~through~~ The potential is estimated to be 300 GW.

(7) Mandatory RPOs (Renewable Power Obligations).

Thus there has been a conscious shift towards renewable power sector. But with the growing demand for power, coal is not going away any time soon:

(1) Coal plants offer a stable long term power as opposed to variable power by ~~clim~~ weather dependent solar and wind.

(2) The coal plants are running at a low plant load factor (PLF) ~~to~~ which indicates a higher potential for them as demand rises.

(3) Coal plants are cheapest to setup and don't require advanced technology/renewables all require high capital and technological investments.

(4) With UMPP (Ultra Mega Power Plants), the regulatory burden will be eased and economies of scale can be leveraged.

~~We~~ We know that coal based power plants contribute a whooping 55% of India's power

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min. Once coal block allocations are finalized, they shall be required to function at high load to meet the growing needs of Indian economy.

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**15.** Write a brief note on 'Dry Ports' and their significance in mitigating logistic challenges in India. Also, discuss the challenges in their development and measures needed to address them. **(250 words) 15**

भारत में लॉजिस्टिक्स की चुनौतियों को कम करने में 'शुष्क पत्तनों' एवं उनके महत्व पर एक संक्षिप्त टिप्पणी लिखिए। साथ ही, उनके विकास में आने वाली चुनौतियों और उनके समाधान हेतु आवश्यक उपायों पर चर्चा कीजिए।

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**16.** Discuss the vulnerabilities of urban areas to disasters. What measures have been taken to minimise the losses in such areas during disasters? What further improvements would you suggest to make them more resilient? **(250 words) 15**

आपदाओं के प्रति शहरी क्षेत्रों की सुभेद्यताओं पर चर्चा कीजिए। आपदाओं के दौरान ऐसे क्षेत्रों में होने वाली क्षति को न्यून करने के लिए क्या उपाय किए गए हैं? आप उन्हें और अधिक लचीला (रिज़िल्यन्ट) बनाने के लिए क्या उपाय सुझाएंगे?

The urban areas have seen shrinking green areas and water bodies. Together with climate change, they have wrecked havoc in the following ~~major~~ disasters:

① Floods:

→ Green areas act as percolation spaces for water. In their absence, the water floods the concrete jungles.

→ Rapid growth and improper planning have led to inefficient drainage. eg: annual floods in Mumbai.

② Droughts:

→ While parts of country are engulfed in floods, other parts face acute water shortage. eg: Chennai needs to buy water from Kerala.

→ The lack of percolation area has prevented recharge of aquifers and water bodies.

→ Hyper extraction of ground water for agriculture of water intensive crops in dried regions has stressed ground water blocks (67% stressed). eg: Sugarcane in Marathwada.

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(3) Extreme weather events like cyclones, cloud bursts, thunder storms have increased in frequency. eg: thunderstorms in April 2018 killed 100 people in north India.

Measures taken:

(1) Floods:
- → Construction of dams to check flow of river.
- → Flood vulnerability map in Odisha.

(2) Droughts:
- → Focus on sustainable water management (eg: PM Krishi Sinchai Yojana)
- → Awareness campaigns on rain water harvesting,
- → Compensatory Afforestation (CAMPA led).

(3) → Doppler radars to forecast thunder storms,
- → Early warning systems and evacuation procedures for cyclones (10000 deaths in 1990s → 50 deaths in 2018 due to Ghaza).

Further improvements:

(1) Floods:
- → Need SOPs for timely release of water from dams and prevent a scenario like Kerala floods
- → Study prospects of river linking projects: would solve ~~projects~~ problems of both floods, drought.

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(2) Droughts:

→ Need to promote cultivation based on water availability (agro climatic zones) through rationalisation of power subsidy (Dalwai committee)

→ CAMPA funds lying unutilised/ diverted. Need to check that.

(3) Doppler radars not working, need repairs and study of locations where they need to be added.

Cyclones in India offer a unique case study of controlling the havoc. This needs to be emulated in other disasters too.

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**17.** What is seabed mining and why is it important for India? Highlight the environmental challenges associated with seabed mining and discuss how these can be addressed. **(250 words) 15**

सीबेड माइनिंग क्या है और यह भारत के लिए क्यों महत्वपूर्ण है? सीबेड माइनिंग से जुड़ी पर्यावरणीय चुनौतियों पर प्रकाश डालिए और चर्चा कीजिए कि इनसे कैसे निपटा जा सकता है।

Seabed mining refers to extraction of metals from Poly Metallic Nodules (PMNs) present on the sea bed of oceans. They are rich in Manganese and rare earth minerals.

Importance for India:

① India has a 7500 km long coastline and consequently a huge EEZ access to seabeds.

② These areas are extremely rich in minerals. It is estimated that 10% extraction could be enough to meet India's needs for next 100 years.

③ These are rich in rare earth metals (REMs) which are critical for advanced technologies like 5G, electric vehicles, IoT etc. We currently import these REMs.

Consequently India has acted fast to renew an exclusive license to mine in central Indian Ocean from International Seabed Authority and launched a Deep Ocean Mission to study the prospects.

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Environmental challenges:

① Many critical species (benthos) survive on seabed of oceans. Scraping it for minerals would threaten their existence.

② The activity of extraction would raise temperature of area concerned. This could result in coral bleaching and affect phytoplankton.

③ The activity could lead to gas hydrates being released from the sea bed. The resultant ~~global warming would~~ methane gas would exacerbate climate change.

How to address?

① Need to perform ~~the activity~~ mining on a controlled basis to study the exact effects before pursuing it fully.

② The technology should be modern to minimise scraping damage to sea beds.

Thus sea bed mining holds a lot of potential for India but the environmental concerns need to be suitably addressed before we go ~~full~~ all guns blazing.

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**18.** Compare and contrast fifth generation (5G) of wireless telecom technology with 4G technology. What challenges need to be overcome for 5G's pan-India rollout? **(250 words) 15**

4G प्रौद्योगिकी के साथ पांचवी पीढ़ी (5G) की वायरलेस दूरसंचार तकनीक की तुलना कीजिए और उनके मध्य अंतर बताइए। 5G के अखिल भारतीय क्रियान्वयन हेतु किन चुनौतियों से निपटने की आवश्यकता है?

5G is an upcoming wireless telecom technology crucial for scaling connectivity for self driving cars, smart cities, IoT etc in addition to better consumer experience.

| 4G | 5G |
|---|---|
| ① Max throughput of 1 gigabits per second. | Max throughput of 100 gigabits per second. |
| ② Latency of 1 millisecond | Latency of 0.1 millisecond |
| ③ Not much focus on scalability. | Focus on scalability, enables IoT, smart cities etc. |

Thus 4G was revolutionary for the user of smartphone, laptop etc, 5G promises faster speeds ~~also~~ for him along with promising scalability.

Challenges:

① Migrating to 5G would require huge expenditure on part of telecom providers that would need to upgrade non-modular hardware

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(2) Consumer devices are not ready for 5G. This would require a costly upgrade on their part.

(3) The telecom sector is stressed and indebted due to stiff competition. They complain about high spectrum auction charges by TRAI. (2-3 times higher than auction in South Korea).

(4) The leading 5G chipmaker Huawei is facing American sanctions. It would be tough for India to decide where it wishes to procure relevant technology from.

(5) Domestic chip manufacturing is not competitive enough. This makes India a mere assembling hub, and increase costs.

We thus see that 5G technology holds a lot of promises for a technology oriented India. It also offers a chance for Make in India (National Electronics Policy, 2018). But the above challenges will need to be overcome ~~with~~ to get there.

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**19.** Despite various initiatives, critical gaps in Indian maritime security architecture have remained. Examine. Suggest some policy measures to address the challenges of maritime security of India. **(250 words) 15**

विभिन्न पहलों के बावजूद, भारतीय समुद्री सुरक्षा की संरचना में महत्वपूर्ण अंतराल विद्यमान हैं। परीक्षण कीजिए। भारत की समुद्री सुरक्षा की चुनौतियों से निपटने हेतु कुछ नीतिगत उपायों का सुझाव दीजिए।

India face maritime security threats from pirates, terrorists, enemy nations etc. Accordingly she has taken initiatives to safeguard the same:

① Automatic vessel identification radars installed on both coast lines.

② Information Fusion Centre - IOR established at IMAC Gurugram to collect information shared under white shipping agreements signed with other nations.

③ Initiatives like IORA, IONS to develop maritime cooperation and trust building in IOR region.

④ Multi-party maritime exercises like ~~Ma~~ MILEX, Sea Vigil along with bilateral exercises like Malabar, JIMEX etc.

⑤ Mission Based Deployments (MBDs) at critical points like Malacca, Hormuz, Andaman etc.

However despite these, critical gaps remain:

① India has just one aircraft carrier. Each one acts as a ~~sto~~ huge deterrent (eg: Vikrant in 1971 war).

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**20.** A fine balance between security and developmental measures needs to be attained for tackling the menace of Left Wing Extremism (LWE) in India. Analyse. **(250 words) 15**

भारत में वामपंथी उग्रवाद (LWE) के खतरे से निपटने हेतु सुरक्षा और विकासात्मक उपायों के मध्य एक उत्कृष्ट संतुलन स्थापित करने की आवश्यकता है। विश्लेषण कीजिए।

LWE ~~is~~ grew to prominence in 1960s and continues to plague states like Jharkhand, West Bengal, Madhya Pradesh, Chhattisgarh etc. Their aim is to establish an alternative system of governance. India has adopted a dual pronged solution:

Security measures:

① It is needed to check their strength and curtail their areas of influence.

② Any development measures alone would be destroyed in LWE areas. eg: telecom towers destroyed in Jharkhand.

③ These would send a strong message to LWE groups about their limited strength and resources and force them to consider surrendering.

④ These involve border security to check flow of arms and funds, and use of force to eliminate LWE.

Developmental measures:

However security measures alone are not enough. A war against LWE is also an ideological war, and victory can be attained only by convincing citizens that the elected government offers them more sustainable solutions.

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① Development of highways, bridges, railway lines to link LWE areas with mainstream areas. eg: Odisha saw a bridge connecting an area for first time with rest.

② Education to prevent brainwashing of young minds and showing them possibilities through peaceful means. Santewada serves as inspiring example in this regard.

③ Skill development of residents in affected areas to enable them to pursue constructive activities. eg: Roshni is an excellent initiative.

④ Periodic elections (ballots, not bullets) and careful inculcation of democratic values and institutions shall reap fruits in long run, as they learn to govern themselves.
In the short run, perhaps greater autonomy could be considered for trust building.

⑤ Public expenditure will be required in agriculture, industries to create jobs for the residents. This will instill positive emotions as they will realise peaceful methods towards growth.

We thus see that both security and developmental measures are needed to check LWE. Only former would make LWE a hydra-kill one and another take his place.

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